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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,084	10/02/2003	Wai Lin Siew	061255-0027	7774

EXAMINER	
PADEN, CAROLYN A	

ART UNIT	PAPER NUMBER
1794	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/676,084	Applicant(s) SIEW ET AL.	
	Examiner Carolyn A. Paden	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,6-14 and 17-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6-14 and 17-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 7, 2007 has been entered.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 6-14 and 17-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin as further evidenced by Baileys and in view of Taylor and Kellens.

Lin discloses combining palm oil with unsaturated oils such as soybean oil, corn and sunflower oils in proportions of 9:1 to 7:3. The blended oils are then cooled to 20C to 3C for crystallization and then separated by filtration. Although the fatty acid content of the unsaturated

oil is not mentioned in Lin, these levels are well known in the art as evidenced by Bailey's to contain the linoleic, oleic and linolenic that is set forth in claim 1. Further applicant includes these oil sources as selected oils in claim 8. The claims appear to differ from Lin in the recitation of the use of heating in the crystallization process. At page 74, Taylor teaches that the slip melting point of palm oil is 63C. So it would have been obvious to heat palm oil to at least 63C prior to cooling in order to melt all of the crystals typically found in the oil. Thus with the reference before him, it would have been obvious to heat the oil of Lin to a temperature of at least 63C in order to form a uniform liquid blend oils for fractionation upon cooling. The filtration step of Lin is taken to be a low-pressure filter press in claim 2. The ratio of saturation and unsaturation in the fatty acids would have been an obvious function of the amount of each of the oils used in the starting blend. The crystallization would have been an obvious function of the cooling rate used in the process. It is appreciated that Lin and Taylor did not point to the yield of fractionated fat crystals; this yield is known in the art as disclosed in Kellens (table 4 on page 342). Finally the use of the oils in foods would have been an obvious matter of choice with regard to the particular edible oil that was available.

It is appreciated that the exact ratio of saturated fatty acids to monounsaturated fatty acids to polyunsaturated fatty acids is not mentioned, it would have been obvious to calculate and adjust this value from the fatty acid content of the palm oil/vegetable oil blend. Lin does not provide fatty acid ratios in the fractionated oil blend. But one of ordinary skill in the art would be able to estimate the fatty acid content of the fractionated liquid oil. This estimate would be expected from the difference between the starting fatty acid content of the oils, disclosed in Taylor and Baileys, and the stearin and olein yield, disclosed by Kellens at Table 4 on page 342. The precise composition of the oil is a product limitation, carrying no weight in the method claims. With regard to the product claims, it would have been obvious to adjust the ratio of the blends of fats of Lin in order to provide for an oil blend that is optimal for advancing heart health, as recommended by the American Heart Association. The fact that the Lin blend is different from the claims is not alone seen to constitute unobviousness. A blend of palm oil and sunflower oil or corn oil (7:3) appears to have a ratio of saturated to mono-unsaturated to polyunsaturated of (1:2:1), as estimated from the fatty acid content of these

oils. One of ordinary skill in the art would be expected to optimize the fatty acid ratios according to the particular health benefits desired.

Applicant argues that Taylor heats the palm oil to a temperature that is outside the range of the claims. This has been considered but is not persuasive. The heating conditions of Taylor would be expected to include the temperature range of the claims. Also there is no requirement in Taylor that oil be heated to 70 C and there is not suggestion that the temperature must be "at least 70C.

Applicant argues that one could not determine the composition of the oil of step d. This is disagreed with. Lin provides for the fatty acid composition of palm olein at Table 2. Taylor provides the fatty acid composition of palm oil and palm olein at Tables I and II. Baileys provides evidence for the fatty acid content of sunflower, corn and soybean oil. Kellens provides yield values for palm olein and stearin at Table 4. With these references before him, it would have been obvious to estimate the fatty acid content of the remaining oil in Lin and adjust the fatty acid content according to the fatty acid content desired. Applicant argues that the fatty acid content of palm olein is different from the fatty acid content of the claims. But palm olein is a solid fraction that is crystallized during the

process and removed from the liquid oil fraction. It would not be expected to be present in the oil fraction of the claims.

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn A Paden whose telephone number is (571) 272-1403. The examiner can normally be reached on Monday to Friday from 7 am to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano, can be reached by dialing 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on

Application/Control
Number: 10/676,084
Art Unit: 1794

Page 7

access to the Private PAIR system, contact the Electronic Business Center
(EBC) at 866-217-9197 (toll-free).

/Carolyn Paden/

Primary Examiner 1794